

Being a subsidiary company of the Tsingshan Group, one of the largest stainless steel long products manufacturer in the world, the Stellar Tube & Pipe Group has been focusing on producing and selling industrial stainless steel pipes since its founding in 2006. With ongoing development on its productivity and competitiveness in the past years, "Stellar" brand stainless steel seamless pipes have taken a remarkable share in both domestic and international markets. In recent years, the stainless steel pipe market has showed a general depression. Manufacturers have been confronted with a series of challenges including fluctuation of nickel price, anti-dumping measures in some of the important markets, and also the economy downturn. How is Stellar Tube & Pipe Group doing in such an environment and what is their strategy to maintain competitiveness? Stainless Steel World visited Stellar's headquarters in Longwan District, Wenzhou City, and spoke to Mr. Wan Chengbei, General Sales Manager of the Stellar Tube & Pipe Group.

### By Zhu Yixing

As a privately owned enterprise Stellar Tube & Pipe Group is currently the largest welded pipes and seamless stainless steel tube manufacturer in China. The group consists of many subsidiaries specialized in seamless stainless steel pipes. In addition, the group has made a series of investment and development projects to strengthen its position in the stainless steel market. In 2010, Shanghai Max

Fittings Co., Ltd was established with a focus on fittings, plates, and wire products. In 2011, Stellar established a joint venture with the Irestal Group – Irestal (Shanghai) Stainless Pipe Co., Ltd,



specialized in welded pipe business. The company has also made investments in stainless steel resource. A nickel mine acquired by the group in Indonesia started its mass production smoothly, and a chromium mine acquired in Zimbabwe started commissioning as well. Based on these acquisitions and investments, Stellar Group has become the top level stainless steel pipe manufacturer in China in terms of scale and financial strength.

# Enhancing project business capability by resources integration

During long term communications with EPC companies and project owners, Stellar Group gradually realized that being a project supplier, their project business capability was becoming more and more essential for its success. Mr. Wan explains: "More and more projects now require package bidding. Each package might consist of pipes, fittings and flange products. The stronger the bidder is, in terms of comprehensive capability, the more possibility there is to win the bid." Facing tough competition, Stellar Group became determined to enhance its capability in project business and provide better products and service to a wide rage of EPC companies and project owners. As a result, the integration of resources in the industry chain gradually became a key point for the company's development. After years of internal integration, Irestal (Shanghai) Stainless Pipe Co., Ltd the only stainless steel welded pipe manufacturer within Tsingshan Group, and Shanghai Max Fittings Co., Ltd, specialized in stainless steel seamless pipe fittings and welded fittings, were merged into the Stellar Tube & Pipe Group. Located in the Shanghai Chemical Industry Park, Irestal Shanghai is the fruit of the win-win cooperation between Stellar Group and the Spanish company Irestal Group, which is one of the largest stainless steel product fabricators and distributors in Europe. Mr. Wan tells us that these advanced production facilities and testing equipment obviously reflect the internal construction principle of the group -"Being more strict in management and aiming for higher targets and levels". Currently its annual production capacity is 15,000 tons in 2013, about 15%-20% higher than that of 2012. Besides their 300 series, the company also produces welded pipes in special materials including duplex. The integration of resources has further enriched Stellar Group's product line and improved its capability in project business.

As a matter of fact, the company has a plan to develop pipe prefabrication business in the future to better satisfy EPC customers' needs.

"We think capacity expansion is no longer a proper way for stainless steel enterprises to maintain competitiveness in the current situation. The market conditions over the last few years has forced us to stop increasing production capacity and adjust our development strategy with the aim of healthier and more effective growth." Mr. Wang continues: "According to this guideline, we've integrated our resources in the industry chain and expanded product lines while giving prominence to improving product quality and grades. We are also active in branching out to other business fields, such as our chromium mining project in Zimbabwe."

## Material self-sufficiency brings remarkable cost advantages

"The whole Tsingshan Group consumes about 600,000 tons of chromium per year. Such huge demand prompted us to think about purchasing a chromium mine several years ago. The chromium reserve in Zimbabwe ranks as second largest in the world so we invested in a 3,500 hectare mine site there in 2011." Mr. Wan continues to explain the current situation of this mine project to us: "The Phase I tentative investment of our smelting plant is about 120 million. The plant has an area of 450 mu and annual ferrochrome production is approximately 500,000 tons. It went into operation last August and now the first batch of 50,000 tons produced by the Phase I plant is on its way back to China.



Stellar employee working on straightening machine.



Finished fitting products.

We will shortly start up Phase II of the project if the overall income is good enough. The projected annual production of Phases II and III is 300,000 and 500,000 tons. Due to the fact that the infrastructure is not particularly good in Zimbabwe, we are planning to invest in an in-house power plant and smelting plant if the investment environment is stable. To date we have directly refined the laterite nickel ore to get ferronickel, obtaining one part ferronickel from ten parts nickel ore. Therefore 90% of transportation cost can be saved and, if the in-house power plant is built, about 60% of electricity costs can be saved also. If the smelting plant runs smoothly in operation, we will then build the Phase II 300Kw generator unit and Phase III 600Kw unit." Mr. Wan points out the importance of this project: "the completion and commissioning of the chromium ore smelting plant may effectively benefit cost control and secure lead time of all our stainless steel products."

With regard to the other major stainless steel material - nickel, Stellar Group has obtained an early cost advantage. In 2008, Decent Investment (Group), the sister group of Stellar, began exploiting a nickel mine in Indonesia. As the business area of this mine will extend from crude ore export to smelting, the overall cost of Tsingshan Group's stainless steel products will be further decreased. We are told that Decent Investment (Group) already entered into a cooperation agreement with Bao Steel last year. According to the agreement, a joint venture smelting plant will be set up in Indonesia which covers the whole process from smelting to rolling of stainless steel bars. "Due to the deficiency in the power infrastructure in Indonesia, and the Laterite Ore Export Ban, newly enacted in January

this year, plus the fact that Indonesia has a coal reserve, we built our own power plant. This has saved us not only significant energy costs but has also cut the expensive transportation costs of the nickel ore. We have two bulk carriers so the crude steel can be transported directly to China."

### Active adjustment in overseas market strategy

Talking of Stellar Group's current situation in overseas markets, Mr. Wan says that the company's brand has received more recognition: "through active marketing activities. The customized Stellar brand stainless steel seamless pipes for overseas markets are yielding sound results. Actually the overseas portion accounts for about half of the total sales. Due to reliable quality, the company obtained certifications from various overseas EPC companies, such as Saipem, Samsung Engineering, Hyundai and KBR. In addition, Stellar is the permanent supplier of KOC, EIL, SK E&C, etc. It has also obtained certifications from many other overseas end users such as Dow Chemical, Shell and Kuwait National Petroleum Company.

Regarding the anti-dumping practice in the Europe market, we understand from Mr. Wan that the impact on Stellar Group is not significant. The company adjusted its market strategy and took substantial



Seamless tube manufactured by Stellar.

countermeasures."We never restrict ourselves to any single market and our business lines cover domestic sales, export, direct contact with projects, agents and equipment manufacturers. Last year, the overseas portion accounted for about 45% of total sales. Due to limited product specifications of European pipe manufacturers, customers buy certain specific sizes from us even though they have to pay extra taxes. Also, many European companies are multinational and many projects run by these companies are located all over the world, while the European antidumping practice only applies in Europe, so we can still do business with these European companies for their overseas projects. Finally, anti-dumping does not include all product types. We will continue to participate in exhibitions to promote our coil, strip, etc, to maintain our market position. Stellar are interested in long term partnerships. We believe the anti-dumping will, sooner or later, come to an end. The market requires persistent cultivation." As the capability in project business improves, Stellar are also investing more



Stellar management team at site of Zimbabwe chromium ore mine.



Engineers in discussion.

in the development of project business in overseas markets. The Middle East, where a mass of projects is running in top gear, is undoubtedly the most important target market. Considering the significant influencing power of well known Korean EPC companies such as Doosan, SK, Samsung and GS, Stellar decided to establish a branch in Korea aiming to better serve EPC companies there and this was opened last year. "Now the Korean EPC companies are all using Japanese or European stainless steel products which are more expensive. As more and more Chinese EPC companies have started to bid for Middle East projects, and the quality of Chinese products improves, Korean EPC companies are also considering Chinese products in order to cut cost. Our local office and native employees will surely benefit the communication with Korean companies. Of course, the branch office will also assist in developing the local end user market in the meantime, such as the traditional heat exchanger and ship building industries."

#### Seeking win-win cooperation

Stellar has been seeking business partners with a focus on technical strength. Being a million ton grade stainless steel exporter, the Group is outstanding in the stainless steel pipe manufacturing industry, both in terms of scale and financial strength. Mr. Wan confides to us that Stellar was looking for cooperation in several areas: "Stellar Group should not be conservative and cease making progress either in the perspective of its management concept or with regard to technical upgrading. Within a short term, Stellar's growth has been significant yet we should reserve



Chairman of Tsingshan Group and deputies of Zimbabwe at business opening ceremony.

enough potential for future development and make a proper grounding."

### **R&D** and product development

"So far our R&D is focusing on the field of smelting. After capacity improvement, the production per batch is about 100 tons, which is too much for R&D. For this reason, we are now modifying a 25 ton furnace in our Qintian plant. A new R&D center is scheduled for June this year." Mr. Wan adds: "from a product aspect, duplex steel is also a concern. The domestic duplex market is getting more and more sophisticated. Our duplex steel production line also has gone into mass production, mainly supplying equipment manufacturers. Since we have our own nickel and chromium mines, we will gradually squeeze down the price of duplex to as low as that of stainless steel, and force down the price of stainless steel towards that of carbon steel. Thus, the market will get bigger and bigger. From a long term view, with the establishment of Tsingshan Stellar Industrial Stainless Steel Co., Ltd (TSISCO) and Irestal (Shanghai), we were able to put welded pipe, flanges and fittings into our product range and, in the next step, we might include

prefabricated pipes as well. Due to the service concerned, prefabrication may add extra value to the products and help to improve the group image. The production base of these products is already available in Ningde, Fujian Province".

### Advantages in the future

Talking about the company's overall product and market plan, Mr. Wan points out that in the field of steel pipes, the group will further invest in duplex and super duplex steel products, a decision based on the industry chain advantage. "Tsingshan Group has quality raw material for iron and steel and an advanced smelting technique. These saved the purification process which was expensive and difficult." explains Mr. Wan who concludes, "generally speaking, our future strategy is to achieve more output value on the basis of the current capacity, rather than expand the capacity unreasonably. We are going to improve product quality and add more value to our product while maintaining current production levels. On that basis, we will also seize the industry chain advantage and pursue a constant improvement in our comprehensive competitiveness!"

**Facts & Figures** 

Name: Stellar Tube & Pipe Group Co., Ltd.

Headquarters: Longwan District, Wenzhou City, Zhejiang Province, China

Products: 300 stainless steel, duplex steel, super duplex Specifications: seamless pipe: OD Φ6-Φ830mm, T 0.5-45mm welded pipe: OD Φ10-Φ2,500mm, T 0.5-50mm

fitting: OD Φ21.3-Φ630mm, T 2-25mm

Annual capacity: seamless pipe: 41,000 tons

welded pipe: 15,000tons

fitting: 2,000 tons

Staff: 2,000